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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/759,272

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Chuan-Kung Hou

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EXAMINER

WANG, KENT F

ART UNIT

PAPER NUMBER

2609

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
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3 MONTHS

03/19/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/19/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

## Office Action Summary

Application No.

10/759,272

Applicant(s)

HOU, CHUAN-KUNG

Examiner

Kent Wang

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Drawings***

2. The drawings are objected to because reference characters 161a and 162a in both Figure 6A and 6B have been mislabeled. The labeled element 161a should be changed to a62a and the labeled element 162a should be changed to 161a (see page 6 lines 18-24 of the specification). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and

informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 - 6, 8 - 10, and 12 - 18, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US Patent 6,930,725) in view of Nakamura (US 6,064,746).

Regarding claim 1, Hayashi discloses a video/audio combo device comprising:

- a housing shell (i.e. image pickup section 22) located in the portable electronic data processing device (i.e. notebook computer 1) (see col. 7, lines 4-12);
- and a picture-taking element (101) located in the housing shell connecting electrically to the portable electronic data processing device (see col. 7, lines 16-22);

Hayashi does not explicitly teach the sound-generating element in the housing shell. Nakamura teaches a sound-generating element (i.e. sounding member 16a) located in the housing shell (i.e. cylindrical main body 12) which being functioned as a resonant space for the sound-generating element (see col. 5, lines 45-52).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hayashi by utilizing the sound-generating element as taught by Nakamura. The motivation to do so would have benefit of using an improved piezoelectric speaker that has a substantially reduced size, and the resonance and vibration is generated (e.g. by the cover members 28a and 28b) (see col. 1, lines 28-32 and col. 5 lines 45-52 of Nakamura).

Regarding claim 12, Hayashi discloses a video/audio combo device comprising a housing shell (i.e. image pickup section 22) located in the portable electronic data processing device (i.e. notebook computer 1) having a viewfinder window and housing a picture-taking element (i.e. CCD video camera unit 101) that corresponds to the viewfinder window (see col. 7, lines 4-30).

Hayashi does not explicitly teach the first and second caps that coupled on either sides of the housing shell. Nakamura teaches an audio device comprising:

- a first cap (28a) coupled on one side of the housing shell having (i.e. cylindrical main body 12) a first audio exit port (i.e. circular holes 30a) and a first sound-generating element (i.e. sounding body 16a) corresponding to the first audio exit port, the first cap serving as a first resonant space for the first sound-generating element (e.g. resonance is generated by the cover member 28a) (see col. 4, lines 12-51 and col. 5 lines 45-52);
- and a second cap (28b) coupled on another side of the housing shell opposite to the first cap having a second audio exit port (30b) and a second sound-generating element (16b) corresponding to the second audio exit port, the

second cap serving as a second resonant space for the second sound-generating element (see col. 4, lines 12-51 and col. 5 lines 45-52).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hayashi by utilizing the sound-generating elements as taught by Nakamura. The motivation to do so would have benefit of using the improved piezoelectric speakers that have a substantially reduced size and are able to reproduce sound in the low sound range (see col. 1, lines 28-31 of Nakamura).

Regarding claim 2, Hayashi clearly teaches a portable electronic data processing device is a notebook computer (a personal computer of the mini notebook type 1; see col. 4, lines 10-13).

Regarding claim 3, Nakamura clearly teaches the housing shell (i.e. cylindrical main body 12) has at least one audio exit port (i.e. circular holes 30a and 30b; see col. 4, lines 12-36).

Regarding claim 4, Hayashi teaches the housing shell (i.e. image pickup section 22) is fixedly located in the portable electronic data processing device (i.e. notebook computer) by means of a screw (see col. 8 lines 18-31).

Regarding claim 5, Hayashi teaches the housing shell is located in the portable electronic data processing device in a turnable manner (see col. 9, lines 10-28 and figures 13A to 13C and 14A to 14C).

Regarding claim 6, Nakamura teaches the housing shell is a cylindrically shaped body member with opposite ends and a hollow interior that defines a sound chamber

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(12). Nakamura does not explicitly teach the closed end having an axle. Hayashi teaches the closed end of the housing shell having an axle (i.e. shaft 112A), the open end being coupled with a cap which has a cap axle, the housing shell being located in the portable electronic data processing device in a turnable manner through the axle and the cap axle (e.g. at bottom of the cap 28a; see col. 4, lines 12-23). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nakamura by utilizing the housing shell as taught by Hayashi so that the housing shell is moved in direction of the axle by turning the moving means and consequently, the focus of the lens can be adjusted to the object (see abstract and col. 9, lines 11-28 of Hayashi).

Regarding claim 8, Nakamura teaches the audio exit port (i.e. circular holes 30a) is located on the closed end of the housing shell (e.g. at bottom of the cap; see col. 4, lines 12-23 and figure 2).

Regarding claims 9 and 10, Hayashi teaches the picture-taking element includes a photosensitive element (114), a lens (103) and a connection line (117) and the photosensitive element is a CCD (114) (see col. 7 lines 16-30).

Regarding claim 16, Hayashi teaches the first cap (i.e. shaft 112A) and the second cap (i.e. receiving member 120) has respectively an axle pivotally coupled on the portable electronic data processing device (see figure 9B and col. 8 lines 18-31).

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Regarding claims 13, 14, 15, 17, and 18, these claims are recited same limitations as claims 2, 4, 5, 9, and 10. Thus they are analyzed as previously discussed with rejected to claims 2, 4, 5, 9, and 10 above.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi in view of Nakamura as applied to claim 1, and further in view of Flingleton (US Patent 6,859,543).

Regarding claim 7, note the discussion of Hayashi and Nakamura above. Hayashi and Nakamura do not teach the audio exit port is located on the perimeter surface of the housing shell. However, Flingleton teaches the audio exit port (i.e. upper opening 10) is located on the perimeter surface of the housing shell (i.e. cylindrically-shaped body member 4). It would have been obvious to one of ordinary skill in the art at the time this invention was made to have used a audio exit port as taught by Flingleton to the housing shell of Hayashi as modified by Nakamura so that the housing shell directs low-range sound, developed within sound chamber, radially outwardly toward the listener (see col. 4, lines 8-34).

5. Claims 11 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi in view of Nakamura as applied to claims 1 and 12, and further in view of Gibler (US Patent 5,291,541).

Regarding claims 11 and 19, note the discussion of Hayashi and Nakamura above. Hayashi and Nakamura do not teach the sound-generating element being a



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Mylar speaker. However, Gibler teaches that one suitable device is a dynamic Mylar speaker (see col. 5, lines 1-10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the Mylar speaker as taught by Gibler to the housing shell of Hayashi as modified by Nakamura so that the signal-to-noise ratio is reduced (see col. 5, lines 1-10).

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- Park et al. (US 7,146,200) is cited to teach a camera lens mounting device of a folder-type telephone.
  - Choi (US 7,061,520) is cited to teach a camera equipped in a portable terminal including a first housing having the camera and a second housing having a display section.
  - Toki (US 6,834,744) is cited to teach a speaker system capable of miniaturization and presenting a good sound quality.

### ***Inquiries***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kent Wang whose telephone number is 571-270-1703. The examiner can normally be reached on 7:30 A.M. - 5:00 PM (every other Friday off). If attempts to reach the examiner by telephone are unsuccessful, the

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examiner's supervisor, Chanh Nguyen can be reached on 571-272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-270-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kent Wang  
12 March 2007

  
CHANH D. NGUYEN  
SUPERVISORY PATENT EXAMINER